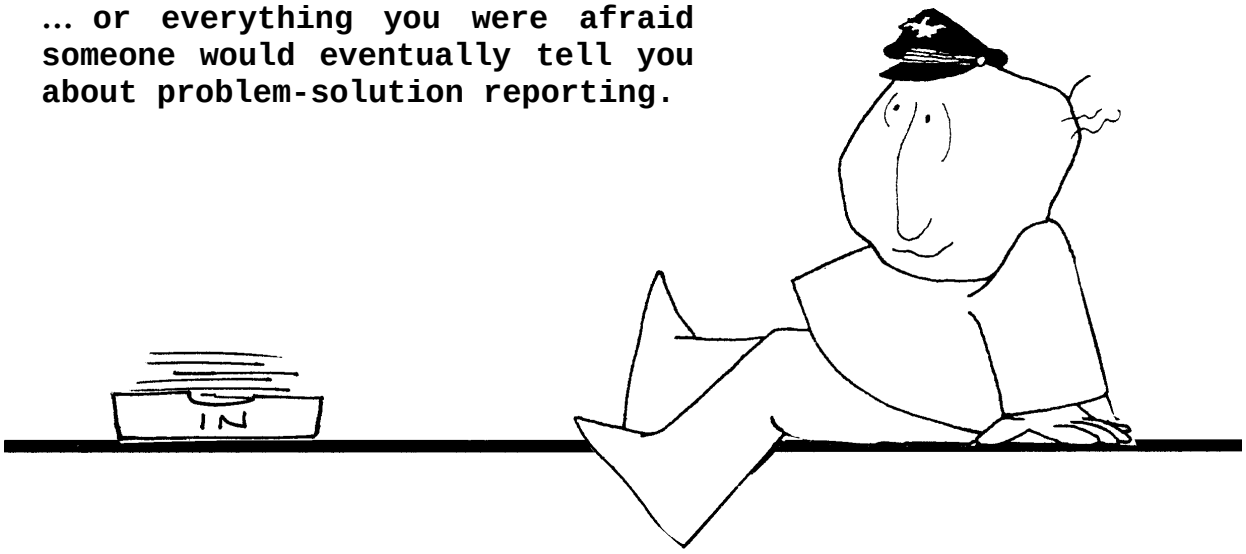
THE STAFF STUDY

… or everything you were afraid someone would eventually tell you about problem-solution reporting.



"I thought the staff study died with crew cuts, saddle shoes and the Sabre Jet!" Well, maybe it has in some places, but what written staff instrument would you use if you needed to lay out a compact but complete problem-solution for a decisionmaker? Probably something like the staff study.

The staff study, as a thought process, is far more important than what you call it or what precise format you follow to write up your problem-solution. There's no single formula for designing reports, and there are probably as many different types of reports as there are situations. By outlining and discussing the staff study, however, you'll understand the essential elements of any report that calls for a problem-solution explanation; i.e., various forms of verbal reports, letters, estimates of the situation, operational plans and orders, and the staff study itself.

You may never write up a problem-solution in the staff study format. However, if you understand and can apply the essential elements of problem analysis, you'll be better prepared for any staff communication. We harbor no deep affection for the staff study. It is one of the most demanding communications packages outside of the Joint Chiefs of Staff environment. So why discuss it in some detail? Because, if you can scale Mount McKinley, the foothills of Kentucky should pose no threat.

ACTIONS BEFORE WRITING YOUR REPORT

Before you can report on a problem, you must mentally solve it. Here's a logical sequence of essential elements:

1. **ANALYZE THE AUDIENCE.** You usually solve problems dropped on you by the hierarchy. Sometimes you generate your own areas or subjects that call for analysis. In any case, there will be political and operational constraints that affect your problem-solving process. Do some reflective thinking about the "environment" in which you're operating.

2. **LIMIT THE PROBLEM.** Restrict it to manageable size by fixing the *who, what, when, why* and *how* of the situation. Eliminate unnecessary concerns. Narrow the problem statement to exactly what you will be discussing—a common error is a fuzzy or inaccurate problem statement. For example, if the problem is the use of amphetamines and barbiturates among junior airmen, the problem statement "To reduce the crime rate on base" would be too broad. So would "How to detect and limit the use of dangerous drugs on base." More to the point would be "To detect and end the causes of amphetamine and barbiturate use among the junior airmen at Wright-Patterson."

The problem should eventually be stated in one of three ways:

As a question:
What should we do to detect and end the causes of amphetamine and barbiturate use among junior airmen on this base?

As a statement of need or purpose:
This base needs to develop ways to detect and end the …

As an infinitive phrase:
To detect and end the causes …

3. **ANALYZE THE WHOLE PROBLEM.** Do the parts suggest other problems that need separate handling? Or do the parts relate so closely to the whole situation you need only one approach?

4. **GATHER DATA.** Collect all information pertinent to the problem. (Tips on how and where to conduct staff research can be found in step 2, pages 13-20.)

5. **EVALUATE YOUR INFORMATION.** Is the information from reliable witnesses? Is it from qualified authorities? Does it qualify as solid support?

"Education should be as gradual as the moonrise, perceptual not in progress but in result."
–George John Whyte-Melville

❻. **ORGANIZE YOUR INFORMATION.** One way to organize information is to place it under headings titled "Facts," "Assumptions" and "Criteria."

- **Facts** should be just that, not opinions or assertions. Identify only those facts that directly bear on the problem.
- **Assumptions** are important because they are always necessary. To reduce a research project to manageable size, it is usually necessary to accept certain things as being true, even if you are not absolutely sure. The validity of your assumptions usually has a great deal to do with the validity of your conclusions. Sometimes desired conclusions can be supported with certain unrealistic assumptions. In evaluating research, seek out the assumptions and make some judgment as to how reasonable they are. If you feel they are unrealistic, make whatever assumptions you feel are correct and try to judge their effect on the conclusions of the study. Sometimes a perfectly logical study explodes in your face because your assumptions were incredibly weak or simply not supportable.
- **Criteria** are those standards, requirements or limitations used to test possible solutions. The criteria for a problem-solution are sometimes provided in complete form by your boss when you are assigned the problem. Sometimes criteria are inherent in the nature of the obstacle causing the problem. The obstacle can only be overcome within certain physical limits, and these limits will establish the criteria for the problem-solution. In most cases, however, criteria are usually inherent in your own frame of reference and in the goal you are trying to attain. This goal and this frame of reference will tolerate only certain problem-solutions, and the limits of this tolerance will establish the criteria for the problem-solution.

  Remember this: **The criteria will not be very useful if you cannot clearly test the possible solutions against them!** Since weak or even lousy criteria are often seen in problem-solution reports, let's examine three examples of criteria and assess their value.

  ❶ "The total solution must not cost more than $6,000 annually."

  ❷ "The solution must result in a 75 percent operationally ready (OR) rate."

  ❸ "The solution must be consistent with the boss' philosophy on personnel management."

  Criterion one is fine; you could easily "bump" your proposed solutions against a specific cost. Criterion two looks good on the surface, but OR rates result from numerous and complex variables. You probably could not guarantee the decisionmaker your "solution" would lead to a 75 percent OR rate. It might **improve** the OR rate or actually lead to a rate **higher** than 75 percent, but before your boss actually **implements** your solution, how would you **know** that? If a criterion cannot be used to test solutions **before** implementation, it is not an acceptable criterion. Criterion three isn't bad, but it's fuzzy. Perhaps it could be written more precisely or left off the formal report altogether. You could still use it intuitively to check your solutions, but realize when you use "hidden" criteria, your report will be less objective.

7. LIST POSSIBLE SOLUTIONS. Approach the task of creating solutions with an open mind. Develop as many solutions as possible. The "brainstorming" technique using several knowledgeable people is a popular approach to generating possible solutions.

8. TEST POSSIBLE SOLUTIONS. Test each solution by using criteria formed while gathering data. Weigh one solution against another after testing each. Be sensitive to your personal biases and prejudices. Strive for professional objectivity.

9. SELECT FINAL SOLUTION. Select the best possible solution—or a combination of the best solutions—to fit the mission. Most Air Force problem-solutions fall into one of the three patterns listed below. Do not try to force your report into one of these patterns if it doesn't appear to fit.

① **Single best possible solution.** This one is basic and the most commonly used. You select the best solution from several possible ones.

② **Combination of possible solutions.** You may need to combine two or more possible solutions for your best possibilities.

③ **Single possible solution.** At times, you may want to report on only one possible solution.

10. ACT. Jot down the actions required for the final solution. Your comments here will eventually lead to the **specific action**(s) your boss should take to implement the solution (this will eventually appear in the "Action Recommended" portion when you write the report). If there is no implementing document for the decisionmaker to sign, you need to state clearly what other specific action the boss must take to implement your proposal. No military problem is complete until action has been planned and executed.

NOTE: In actual practice, the steps of problem solving do not always follow a definite and orderly sequence. The steps may overlap, more than one step may be considered at one time, or developments at one step may cause you to reconsider a previous step. For example, the data you collect may force you to redefine your problem. Similarly, while testing solutions, you may think of a new solution or, in the process of selecting a final solution, you may discover you need additional information. The steps just outlined can serve as a checklist to bring order to your mental processes.

WRITING YOUR REPORT

Here is the suggested format for a staff study report. Use only those portions of this format necessary for your particular report. If you omit certain paragraphs, renumber subsequent paragraphs accordingly.

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY (AETC)

4 Feb 97

MEMORANDUM FOR

FROM: ACSC/DER
225 Chennault Circle
Maxwell AFB AL 36112-6426

SUBJECT: Preparing a Staff Study Report

PROBLEM

1. Clearly and concisely state the problem you are trying to solve.

FACTORS BEARING ON THE PROBLEM

2. Facts. Limit your facts to only those directly relating to the problem.

3. Assumption. Should be realistic and support your study.

4. Criteria. Give standards, requirements, or limitations you will use to test possible solutions. Ensure you can use standards to measure or test solutions.

5. Definitions. Describe or define terms that may confuse your audience.

DISCUSSION

6. This section shows the logic used in solving the problem. Introduce the problem and give some background, if necessary. Then explain your solution or possible solution.

CONCLUSION

7. State your conclusion as a workable, complete solution to the problem you described previously in "Discussion."

ACTION RECOMMENDED

8. Tell the reader the action necessary to implement the solution. This should be worked so the boss only needs to sign to make the solution happen.

JOSEPH C. GUILLOT, Lieutenant Colonel, USAF
Deputy Chairman, Research Department

Attachments:
(listed on next page)

By now you probably realize the staff study is a problem-solution report that presents data collected, discusses possible solutions to the problem and indicates the best solution. **It is not a style to solve a problem**. You should *mentally* solve your problem, and then *report* the solution in writing. The format of the staff study report includes a **heading**, a **body**, an **ending** and, when necessary, the **attachments**.

1. HEADING. Leave after MEMORANDUM FOR blank. This allows the report to seek its own level. After FROM, enter your complete office address (see page 134, paragraph 3). After SUBJECT, state the report's subject as briefly and concisely as possible. However, use a few extra words if this will add meaning to your subject.

2. BODY. The body of the report contains five parts: (1) **Problem**, (2) **Factors Bearing on the Problem**, (3) **Discussion**, (4) **Conclusion** and (5) **Action Recommended**. These parts coincide with the steps of problem solving. That's why the staff study report is a convenient way to report your problem-solution.

Steps of problem solving	**Body of staff study**
1. Recognize the problem	1. Problem
2. Gather data	2. Factors Bearing on the Problem
3. List possible solutions	3. Discussion
4. Test possible solutions	4. Conclusion (a brief restatement of final solution)
5. Select final solution	5. Action Recommended
6. Act	

Problem. The statement of the problem tells the reader what you are trying to solve. No discussion is necessary at this point; a simple statement of the problem is sufficient. You have ample opportunity to discuss all aspects of the problem later in the report.

Factors Bearing on the Problem. This part contains the facts, assumptions, criteria and definitions you used to build possible solutions to your problem. Devote separate paragraphs to facts, assumptions, criteria and definitions as shown in the sample study report. Obviously, if you write a report in which you have no assumptions or definitions, omit either or both. Include only those important factors you used to solve your problem. Briefly state whatever you include. Put lengthy support material in attachments. Write each sentence completely so you don't force the reader to refer to the attachments to understand what you've written.

Discussion. This part of the report is crucial because it shows the logic used to solve the problem. Generally, some background information is necessary to properly introduce your problem. The introduction may be one paragraph or several paragraphs, depending on the detail required. Once the intro is complete, use one of the following outlines to discuss your thought process.

➢➢➢When using the single best possible solution:

① List all possible solutions you think will interest the decisionmaker.
② Show how you tested each possible solution against the criteria, listing both the advantages and disadvantages. Use the same criteria to test each possible solution.
③ Show how you weighed each possible solution against the others to select the best possible solution.
④ Clearly indicate the best possible solution.

➢➢➢When using the combination of possible solutions:

❶ List all the possible solutions you think will interest the decisionmaker.
❷ Show how you tested each possible solution against the criteria, listing both the advantages and disadvantages. Use the same criteria to test each possible solution.
❸ Show how you weighed each possible solution against the other possible solutions and why you retained certain ones as a partial solution to the problem.
❹ Show how and why you combined the retained possible solutions.

➢➢➢When using the single possible solution:

① List your single solution.
② Test it against the criteria.
③ Show how and why this solution will solve the problem.

No matter how you organize your report, these points are important: (1) make it brief, (2) maintain a sequence of thought throughout, (3) show the reader how you reasoned the problem through and (4) use attachments for support, but include enough information in the body of the report to make sense without referring to the attachments.

Conclusion. After showing how you reasoned the problem through, state your conclusion. The conclusion must provide a complete, workable solution to the problem. The conclusion is nothing more than a brief restatement of the best possible solution or solutions. The conclusion must not continue the discussion. It should completely satisfy the requirements of the problem; it should never introduce new material.

Action Recommended. This part tells the reader what action is necessary. The number of recommendations is not important; just be sure you have "completed staff work."

Word the recommendations so your boss need only sign for action. Do not recommend alternatives. This does not mean you cannot consider alternative solutions in "Discussion." It means you commit yourself to the line of action you judge best.

You must relieve the decisionmaker of the research and study necessary to decide from several alternatives. Give precise guidance on what you want the decisionmaker to do; i.e., "Sign the implementing letter at attachment 1." (Normally, implementing documents should be the first attachment.) Don't submit a rubber turkey. Recommendations like "Recommend further study" or "Either solution A or B should be implemented" indicate the decisionmaker picked the wrong person to do the study.

3. ENDING. Follow the format shown on the sample report. The ending contains the name, rank, and title of the person or persons responsible for the report and a listing of attachments. Do not use an identification line.

4. ATTACHMENTS. Since the body of the staff study report must be brief, relegate as much of the detail as possible to the attachments. Although seldom required, identify material needed to support an attachment as an appendix to the attachment.

- Include, as attachments, the directives necessary to support the recommended actions.
- The body may reference the authority directing the study. An attachment may contain an actual copy of the directive.
- The body may contain an extract or a condensed version of a quotation. An attachment may contain a copy of the complete quotation.
- The body may contain a statement that requires support. An attachment may state the source and include the material that verifies that statement.
- The body may refer to a chart or information in a chart. An attachment may include the complete chart. (Design the chart to fit the overall proportions of the report or fold the chart to fit these proportions.)
- If directives or detailed instructions are required to implement the recommended action, include the drafts as attachments.

5. TABS. Number tabs (paper or plastic indicator) to help the reader locate attachments or appendices. Affix each tab to a blank sheet of paper and insert immediately preceding the attachment. If it is not practical to extract the supporting material from a long or complex document used as an attachment, affix the tab to that page within the attachment or appendix where the supporting material is located.

Position the tab for attachment 1 to the lower right corner of a sheet of paper. Position the tab for each succeeding attachment slightly higher on a separate sheet so all tabs can be seen.

COMPLETED STAFF WORK

A staff study report should represent completed staff work. This means the staff member has solved a problem and presented a complete solution to the boss. The solution should be complete enough that the decisionmaker has only to approve or disapprove.

The impulse to ask the chief what to do occurs more often when the problem is difficult. This impulse often comes to the inexperienced staff member frustrated over a hard job. It's easy to ask the chief what to do, and it appears easy for the chief to answer, but you should resist the urge. Your job is to advise your boss what should be done—provide answers, not questions. Of course, it's okay to inquire at any point in the problem-solving procedure if you need to find out whether you are on the right track. This coordination often saves untold hours.

Some final thoughts on completed staff work and problem-solution reporting:

★ Completed staff work provides the creative staffer a better chance to get a hearing. Unleash your latent creativity!

★ Schedule time to work the problem. Most problems worthy of analysis require considerable study and reflection.

★ There's usually no school solution—no "hidden cause" that will jump up and bite your kneecap. That's life. Avoid simplistic solutions; e.g., "Fire the idiots and get on with the program."

★ Don't assume that the heavier and fancier the study, the better it is. A smart decisionmaker focuses on the relevance and accuracy of your supporting material and the logic of your argument.

★ Don't work a study in isolation. If you point your finger at someone or some unit, or if the solution requires a change in someone's operation, you'd better get their reaction before you drop the bomb. You can look mighty foolish if you find out later they were operating under a constraint of which you were unaware.

★ Remember the final test for completed staff work: If you were the boss, would you be willing to stake your professional reputation on this problem-solution report? If the answer is "no, go back to Go. Do not collect $200." It's time to start over.

"No man is fully able to command unless he has first learned to obey."

–Latin Proverb